



TERAI ARC LANDSCAPE PROGRAM



July 1, 2001 – December 31, 2001

Partners:

His Majesty's Government of Nepal/Ministry of Forests & Soil Conservation,
Department of National Parks and Wildlife Conservation, Department of Forests,
King Mahendra Trust for Nature Conservation, Community Forestry Users' Groups,
Community Based Organisations, Local line agencies, Local NGOs

Donors:

United States Agency for International Development,
Directorate General International Cooperation, Ministry of Foreign Affairs-Netherlands,
US Fish and Wildlife Services, Save the Tiger Fund/NFWF,
AREAS/ WWF International, WWF US

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Table of Contents

A. Project	6
B. Reporting Period	6
C. Name and Address	6
D. Authorship	6
E. Executive Summary	6
F. Introduction	7
G. Wider Context	8
H. Objectives	9
I. Changes	9
J. Progress	10
J. (1) Biological Monitoring	10
J. (2) Forest Conservation and Management	11
J.(2.1) Nursery	11
J.(2.2) Plantation	11
J.(2.3) Natural Forest Regeneration	12
J.(2.4) Users Groups Institutionalization	15
J.(2.4.1) Legalization of Community Forest User Groups	15
J.(3) Species Conservation	16
J.(3.1) Habitat Management	16
J.(3.2) Anti Poaching Unit	17
J.(3.3) Wildlife Monitoring	18
J.(3.4) Black Buck Conservation Bardia	19
J.(4) Sustainable Development	20
J.(4.1) Alternative Energy	20
J.(4.1.1) Biogas Plants.	20
J.(4.1.2) Improved cooking Stove	20
J.(4.2) Livestock Management.	20
J.(4.3) NTFP Nursery	21
J.(4.4) Income Generation	21
J.(4.5) Day Care Center	21
J.(4.6) Health care and support.	22
J.(4.7) Irrigation and infrastructure support	22
J.(4.8) Temple renovation	22
J.(4.9) Tube Well construction	22
J.(5) Education and Capacity Building.	23
J.(5.1) Education	23
J.(5.2) Capacity Building	24
J.(6) Communication	24
J.(6.1) Campaigns	24
J.(7) Policy and Advocacy	25
J.(7.1) Proposed TAL Policies	25
J.(7.2) Field Level Stakeholders Transboundary Meeting	25
K. Achievements	25
L. Conclusion	26

Abbreviations & Acronyms

AFO	Assistant Forest Officer
APU	Anti-poaching Unit
BCP	Bardia Conservation Project
BICP	Bardia Integrated Conservation Project
BZ	Buffer Zone
CBO	Community Based Organization
CCS	Creative Conservation Society
CFC	Community Forest Committee
DFO	District Forest Office
DNPWC	Department of National Parks and Wildlife Conservation
DoF	Department of Forests
GIS	Geographical Information System
Ha	Hectare
hh	Household
ICDP	Integrated Conservation and Development Program
IGA	Income Generation Activity
Kg	Kilogram
KMTNC	King Mahendra Trust for Nature Conservation
MFSC	Ministry of Forests and Soil Conservation
M.Sc.	Master of Science
NTFP	Non Timber Forest Products
PCPC	People's Campaign for Park Conservation
RNA	Royal Nepalese Army
RBNP	Royal Bardia National Park
RSWR	Royal Shuklaphanta Wildlife Reserve
RTCPA	Regional Training Center Protected Area
VDC	Village Development Committee
WETTREC	Western Terai Tiger, Rhino and Elephant Complex
WWF	World Wide Fund for Nature also known as World Wildlife Fund

Terai Arc Landscape

Summary Sheet

Country and Project Title Nepal: Terai Arc Landscape (TAL) Program	
Project Start Date: July 2001	Project End Date: July 2006
Report Prepared By: Tshering T. Lama	Reporting Period: July 2001 to December 31, 2001
Long term goal of the project	To conserve the biodiversity, soils and watersheds of the Terai and Churia (Shivalik) hills in order to ensure the ecological, economic and socio-cultural integrity of the region.
Proposed achievements for this fiscal year	<ul style="list-style-type: none"> • Restoration of forest corridors of Basanta and Katarniaghat. • Protected Areas management strengthened of Parsa Wildlife Reserve (PWR), Royal Chitwan National Park (RCNP), Royal Bardia National Park (RBNP) and Royal Shukla Phanta Wildlife Reserve (RSWR). • Capacity building and mobilisation of users groups. 250 ha of forests protected by users groups. • Increased conservation awareness among communities and school children. • Promotion of biogas and improved cooking stoves. • Integrated conservation and development program implemented including income generation activities, agro forestry, ecotourism etc. • Poaching, illegal trade and resource use reduced. • 20 anti poaching units operating through out the TAL. • Nurseries established and 100 ha plantation carried out. • 10 rhinos translocated to RBNP. • Geographic Information System (GIS) baseline and biological monitoring developed.

Important achievements in the reporting period

- Supplementary Agreement signed with the Ministry of Forests and Soil Conservation on July 13, 2001 for TAL implementation.
- Two field offices set up in Bardia and Dhangadi for the two TAL project components of TAL-Department of National Parks and Wildlife Conservation (DNPWC) and TAL-Department of Forests (DoF).
- Program Coordinators and Project Managers appointed by DNPWC and DoF for the two TAL projects.
- 3 technical and 2 finance staff appointed by WWF Nepal.

TAL DoF

- 12 nurseries were established with a capacity of producing 310,000 seedlings.
- 161.5 ha of plantation carried out.
- Encroachment removed from 5500 ha of forests in the Basanta Corridor with people's participation.
- 2 community based anti poaching units (APU) have been started in the forest corridors.
- 22 bio gas plants are being installed.
- 30 female piglets were distributed to members of 3 women's groups for income generation.
- A day care centre was started and 42 children are attending it.
- 6 literacy classes for 150 local livestock herders have been completed.
- 3 eco clubs have been formed and audio visual programs for conservation awareness conducted.
- GIS baseline of the Basanta corridor has been developed and conservation plan prepared for the Western Terai Churiya region, west of Bardia.
- Studies on socio economic conditions, forest conditions and biodiversity, and community and corridor forest management of the TAL area has been carried out.
- M.Sc. studies of two DOF staff are being supported.

TAL DNPWC

- 150 ha of grassland under management.
- 4 waterholes constructed for wildlife.
- 17 APU operating.
- Anti poaching capacity building training and equipment provided for Park and army personnel.
- Health post renovated in Mahadevpur VDC.
- 20 '*Sampada sandook*' environmental education kits prepared.
- Street theatre for conservation awareness organised in different locations.
- Field level meeting on transboundary cooperation was organised in RBNP and RCNP.
- The GIS unit is maintaining and improving the GIS database on TAL.
- Studies on Gaps in Protected Areas management and biodiversity completed.

Summary of work plan for fiscal year July 2001 - July 2002

Forest Conservation and Management

- 7 nurseries established
- 250 ha protected by users groups.
- 50 participants trained in community/collaborative forestry.
- 175,000 quality seedlings produced from nurseries and 100 ha plantation carried out.
- GIS baseline developed

Species Conservation

- Degraded corridors restored.
- Biological monitoring for TAL developed.
- 70 km trenches and biofences constructed.
- 19 anti poaching unit (APU) posts maintained of which 17 will operate in Protected Areas and 2 community based APU posts will be initiated and operate in the forest corridors.
- Wildlife monitoring continued and wildlife damages reduced.
- Updated database.
- 10 watch towers & 2 guard posts constructed.
- 40 kms forest road constructed.
- Rhino action plan developed.

Sustainable Development

- Bio gas promoted as alternative energy. 200 biogas installed.
- 100 improved cooking stoves installed.
- Stall feeding of livestock promoted and veterinarian services provided.
- Support provided for community services such as drinking water, irrigation and health care.
- Ecotourism developed and promoted.
- Agro forestry promoted and 50 farmers trained.
- Income generation activities including forming groups and promoting pig farming, fish farming etc.
- Gender mainstreaming and workshops carried out.
- Mothers/women's groups supported and strengthened.
- RBNP tourism plan implemented.

Conservation Education and Capability Building.

- *Gothala* (cattle herders) conservation education classes continued for 180 gothala
- 15 Eco clubs formed.
- Conservation education supported in 5 sites.

Communication

- Information disseminated to all the stakeholders.
- Video on TAL and other promotional materials produced.
- Photo documentation carried out.
- Website updated.

Policy and advocacy

- Policy guidelines for TAL developed.
- 1 field level and 1 national level transboundary meeting conducted.
- RBNP policy document developed and made available.
- Conservation fund established.

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- A. Project: Terai Arc Landscape Program**
- B. Reporting Period: July 2001 - December 31, 2001**
- C. Name and Address: WWF Nepal Program, PO. Box-7660, Kathmandu Nepal**
- D. Authorship: Tshering T. Lama**
- E. Executive Summary**

The Terai Arc Landscape (TAL) is the only remaining natural habitat on the outer foothills of the Himalayas. Extending from the Bagmati River (Nepal) in the east to the Yamuna River (India) in the west, and covering more than 49,500 km², TAL is also one of the most biologically diverse habitats on the Earth. The Terai Arc Landscape Program was initiated on July 16, 2001. The goal of TAL is to conserve the biodiversity, soils and watersheds of the Terai and Churia hills in order to ensure the ecological, economic and socio-cultural integrity of the region. This will be achieved by managing existing forest as corridors in collaboration with the local communities, government, national and international non-governmental organizations, and donor agencies through community participation to maintain biological diversity, gene flow and uplift the local economy.

A Supplementary Grant Agreement was signed between the Ministry of Forests and Soil Conservation (MFSC) and WWF Nepal Program (WWF NP) on July 13, 2001 for TAL implementation. It has two project components, which are the TAL-Department of National Parks and Wildlife Conservation (TAL-DNPWC) and the TAL-Department of Forest (TAL-DOF). The first quarter of the program focused on appointing and hiring staff and opening the field offices of TAL-DNPWC in the Royal Bardia National Park (RBNP) and of TAL DOF in Dhangadi. The Western Terai Churia Conservation Program (Tiger, Rhino and Elephant Complex) known as WETTREC was then merged into the TAL program. WETTREC was funded by WWF International's Asian Rhino and Elephant Action Strategies (AREAS) program and Save the Tiger Fund, National Fish and Wildlife Services. At the same time, the Bardia Integrated Conservation Project (BICP) funded by the Directorate General International Cooperation of the Ministry of Foreign Affairs, Netherlands (DGIS) was also merged into the TAL program as it completed its 6 years implementation on November 30, 2001.

With the initiation of TAL program, activities on improving National Park, APU, community services, conservation education and culture conservation has been continued. The Integrated Conservation and Development Program (ICDP) activities are carried out in the selected VDCs of Bardia, Banke, Kailali, Kanchanpur, Nawalparasi, Dang and Palpa. 12 forest nurseries have been established with a capacity of producing 310,000 seedlings and 161.5 ha of plantation carried out. A major achievement was that encroachment of illegal settlers was removed with local communities participation from over 5500 ha of forests in the Basanta Corridor. At the same time, 2 community based anti poaching units (APUs) have been started in the forest corridors. Where as there are 17 APUs operating in the protected areas of RCNP, RBNP, PWR

and RSWR. Among ICDP activities, 22 bio gas plants are being installed. 30 female piglets were distributed to members of 3 women's groups for income generation. A day care centre was started and 42 children are attending it. 6 literacy classes for 150 local livestock herders have been completed. 3 Eco clubs have been formed and audiovisual programs for conservation awareness conducted. GIS baseline of the Basanta corridor has been developed and conservation plan prepared for the western Terai Churiya region, west of Bardia. Studies on socio economic conditions, forest conditions and biodiversity, and community and corridor forest management of the TAL area has been carried out. Along with this, M.Sc. studies of two DOF staff are being supported.

In the Protected Areas of PWR, RCNP, RBNP and RSWR, 150 ha of grasslands is under management. 4 waterholes were constructed for wildlife. Anti poaching capacity building training and equipment has been provided for Park and army personnel. A health post has been renovated in Mahadevpur VDC. 20 'Sampada sandook' which are environmental education kits have been prepared and will be distributed to schools. Street theatre for conservation awareness was organised in different locations. Additionally, field level meeting on transboundary cooperation was organised in RBNP and RCNP. The Geographic Information Systems (GIS) unit is maintaining and improving the GIS database on TAL and studies on Gaps in Protected Areas management and biodiversity have been completed. During this reporting period, the gazetting of the RBNP extension area by His Majesty's Government of Nepal (HMG/N) did not take place therefore the work planned for the extension area could not be carried out.

F. Introduction

The Terai Arc Landscape is one of the most biologically diverse habitats in the Earth. It harbors 86 species of mammal, 550 species of birds, 47 species of herpeto-fauna, 126 species of fish, and over 2100 species of flowering plants. Alluvial grasslands and subtropical deciduous forests of TAL not only support the highest recorded densities of the tiger (*Panthera tigris tigris*) in the world and the second largest population of the Greater One Horned Rhinoceros (*Rhinoceros unicornis*), it also supports a wide variety of megafauna including elephants (*Elephas maximus*), Gangetic Dolphin (*Platanista gangetica*), Swamp Deer (*Cervus duvauceli*), and Blue Bull (*Boselaphus tragocamelus*). Therefore, the natural heritage of the Terai Arc Landscape is of global significance.

From the regional perspective, TAL plays an equally important role in maintaining linkage between networks of 11 protected areas, which stretch along the Indo-Nepalese border. Forests connecting these protected areas vary from dense, intact forest to forests in various stages of degradation. For example, in the far western Nepal, Royal Suklaphanta Wildlife Reserve is no longer connected with Royal Bardia National Park through lowland Terai forest because of a significant decrease in forest cover during the last three decades due to human activities. However, there is still an opportunity at present to maintain a linkage between RSWR and RBNP by providing protection to the remaining forest along the foothills of the Churia Hills. Likewise in India, the only remaining connection between Katarniaghat Wildlife Sanctuary and Dudhuwa National Park is through existing forest corridors on the Nepalese side of the border. Managing these forest corridors both in the Terai and Churia (Shivaliks) hills under a single umbrella of TAL will provide trans-boundary dispersal corridors and migration paths for tigers, rhinos, elephants and many other species, which are crucial for maintaining biological diversity and gene flow.

In Nepal's context, the conservation of TAL is equally important from an economic point of view. The Nepalese portion of TAL extends from the Bagmati River in the east to the Mahakali River in the west and includes over 75% of remaining forests of Terai and foothills of Churia Range. Conservation of the Churia forests is crucial for preventing soil erosions, flash floods, and recharging the water table of the Terai, the most productive land in the country. Therefore, sustainable management of TAL will help maintain biological diversity and also meet national demand of forest products and food supply for its rapidly growing human population.

The Terai Arc Landscape is thus important from the national, regional, and global perspective for its rich biological diversity. If managed properly it will be the largest and the only remaining natural habitat on Earth where endangered megafauna such as rhinoceros, elephants and tigers will live in harmony with human beings.

G. Wider Context

The Kingdom of Nepal has adopted a parliamentary form of democracy with the King as a constitutional monarch since 1990. The Gross Domestic Product (GDP) for 1999 is reported to be US\$1237. Finance and technological limitations has meant little industrial growth has occurred within the landlocked country. Over 80% of the economically active population are dependent on agriculture. The topography of the country, a result of the range in altitude extending from 60m asl to 8848m asl has given the country a uniquely diverse range in climate and geography for the relatively small area it occupies (147,181 sq.km).

Nepal is noted for its exceptionally high biodiversity, 847 species of birds including 6 endangered species, about 640 species of butterflies, 6,500 species of flowering plants and 175 mammal species. Tigers, rhinos and elephants are fully protected in Nepal under the National Parks and Wildlife Conservation Act 1973. However, awareness of the conservation need of these megafauna is low in the country and enforcement of legislation is far from effective due to constraints of human, financial and technical resources. Conflict with human encroachment and illegal hunting and sale of parts remain primary threats.

The year 2001 has been a year of political upheavals for Nepal. The Maoist insurgency, that has been going on for over 5 years, has gained momentum in the rural parts of the country and entered urban areas. The country entered a period of national crisis when it was rocked by the tragic deaths of the entire royal family in June 2001. Very recently, in July 2001, Prime Minister Girija P. Koirala resigned and was succeeded by Mr. Sher Bahadur Deuba of the ruling Nepali Congress. A positive note is that the opposition parties and even the revolutionary Maoists have voiced their support of the new leadership. With the new monarch, His Majesty King Gyanendra Bir Bikram Shah Dev, an active and recognised environmentalist, there is hope for increased conservation awareness and actions.

A major achievement of WWF Nepal this year, has been the signing of the Supplementary Agreement with the Ministry of Forests and Soil Conservation on 13 July 2001. The agreement will be valid for 5 years and specifies co-operation for the conservation of species and forests, for sustainable development and landscape level planning. Landscape level planning particularly

focuses on the Terai Arc Landscape (TAL) program that is home to the tiger, rhino and elephant. TAL program intends to connect the protected areas from Nepal's Parsa Wildlife Reserve and Royal Chitwan National Park to India's Rajaji-Corbett National Parks in the west. This visionary program intends to bring about transboundary co-operation between Nepal and India for maintaining linkages and corridors between parks. WWF Nepal and WWF India signed a Memorandum of Understanding in 2001 to co-operate for achieving the goals of TAL and are working together for transboundary co-operation.

H. Objectives

1) Forest Conservation and Management

To restore and manage degraded forest corridors and maintain links between protected areas within the TAL as dispersal corridors through community forestry, plantation and natural forest regeneration and by strengthening community forestry user groups

2) Species Conservation

To conserve tiger, elephant, rhino and other species of special concern including plants and bird, while preserving their habitat integrity and increasing the land base that supports their viable population by improving and strengthening all protected area in the TAL.

3) Sustainable Development

To maintain and enhance environmental services for agricultural productivity, soil conservation and watershed management that enhance local livelihoods and reduce poverty through community participation using innovative approaches to integrate conservation and natural resource management.

4) Conservation Education and Capability Building

To promote conservation education to local communities and strengthen stakeholders capacity by supporting institutions, developing environmental education packages and conducting environmental interactions.

5) Communication and Marketing

To develop effective coordination and communication among conservation partners and stakeholders and develop promotional materials for fund raising and information dissemination.

6) Policy and advocacy

Strengthen institutional policy, legal framework and enhance coordination between India and Nepal as well as achieve long-term financial security TAL conservation.

I. Staffing

It was decided that the Department of National Parks and Wildlife Conservation and the Department of Forests would depute their staff as Project Managers to the two TAL project components. WWF would appoint the Co Project Manager. Subsequently, Mr. Barna Bahadur Thapa, Assistant Warden of RBNP was appointed as the TAL DNPWC Project Manager. Ms. Sushila Nepali was appointed by WWF NP as the Project Co Manager. She has worked earlier as

the Asst. Project Manager of the successful ICDP, Bardia Integrated Conservation Project. Later she had been transferred temporarily to WETTREC from December 21, 2000 to July 31, 2001 as Deputy Project Manager. Additional staff appointed by WWF NP include the GIS technician Mr. Gokarna Jung Thapa and the Asst. Finance and Administration Officer, Mr. Yogendra Chhettri.

For TAL DOF project, Mr. Ram Prasad Lamsal was deputed by DOF as the Project Manager. WWF NP appointed Mr. Dhana Rai as the Project Co Manager from August 1, 2001. Mr. Gyan Nyaupane, the Project Manager of WETTREC has left to pursue further studies and Mr. Rai took over from him as WETTREC was merged into the TAL program. Mr. Rai has 5 years experience as the project manager of the Northern Mountains Conservation project, an ICDP implemented by WWF with USAID (United States Agency for International Development) funding in Dolpo district. Sunil Dahal, Asst. Administration and Finance Officer has been appointed by WWF NP for TAL DOF.

J. Progress

J.(1) Biological Monitoring

TAL has hired Dr. Anup Joshi as a consultant in order to develop the TAL biological monitoring at two spatial scales namely, landscape and site level monitoring. Landscape-scale monitoring will include GIS and Remote Sensing (RS) information and will be done for land cover, land use change, habitat fragmentation and loss, coarse scale intactness of critical corridors and bottlenecks. Similarly, site-scale monitoring will be carried out for habitat structure, disturbance and vegetation compositions, regeneration in restoration areas, for focal species (presence or absence, relative abundance, demographic trends) and for water quality as an indicator of both aquatic and terrestrial habitats. A detailed work plan with methodology has been developed for biological monitoring. A first draft of the detail manual to carry out tiger and carnivore survey has been prepared by Dr. A. Joshi.

Bird Monitoring

A draft TOR for bird monitoring has been developed. Mr. Rajendra Suwal was identified as the expert for carrying out the bird monitoring. Planning for the same was carried out.

Vegetation Monitoring

A draft TOR for vegetation monitoring has been developed and sent to the Department of Forest Research and Survey (DFRS) for review. It is intended to carry out this component of the biological monitoring in partnership with the DFRS.

Remote Sensing

Dr. Anup Joshi has consulted with the experts from the University of Minnesota and Hunter College to discuss on the best time period for which satellite scenes should be analyzed for the best representation of the forest cover. He has reviewed remote sensing and photometric literature on choosing right seasonality for acquiring satellite data. 8 satellite scenes covering entire TAL have been identified and procured and data processed ready for rectification. Dr. Joshi is currently working with Javier to rectify satellite scenes and prepare data for classification.

GIS

Dr. Anup Joshi discussed with related experts for developing metadata standards for TAL GIS center. Alongwith WWF GIS technicians , he is developing an outline for metadata standards to be implemented for TAL. An MOU was signed on January 18, 2002, between WWF NP and ICIMOD to establish a system for GIS information exchange between two organizations. WWF/NP is currently digitizing.

J. (2) Forest Conservation and Management

J. (2.1) Nursery

Forest nurseries are established in order to produce seedlings to be used for plantation. In the process, altogether 12 nurseries have been established with a capacity of producing 310,000 seedlings of various tree species. Seedlings were distributed during this reporting period mainly to user groups and to a small number of seedlings distributed to individual farmers for plantation in their private land.

The table below shows the location of nurseries that have been established:

Table -1: Nurseries operated

S.N.	Location	Managed by	Capacity
1	Rana Mudha , Hasulia	Rangepost, Basanta	80,000
2	Basanta , Ratanpur	Rangepost, Basanta	20,000
3	Nimabojhi, Hasulia	Amrit Mahila CFUG	20,000
4	Pahalmanpur Elaka	Elaka, Kailali	20,000
5	Khata Range Post	Rangepost, Khata	50,000
6	Khata	CFUG, Khata	10,000
7	5 sites in Lamahi area	CFUG Network	1,00,000
8	Dovan, Palpa	Range Post, Dovan	10,000
		Total	310,000

J. (2.2) Plantation

Plantation is mainly carried out in degraded patches of forest areas by forest users' groups. These are then protected by them. The seedlings were supplied from the nurseries and also some seedlings were bought from other private nurseries. Details of user groups plantation activities (individuals excluded) are given below:

Table - 2: Group plantations

	Location	Planted by	Area (ha)	Species planted (local name)	Seedlings	Land type
1	Hasulia-1, Bhitaria	Mahila CF	10	Sisoo, Masla and Bans	777	Encroached
2	Hasulia-1, Ke Gaon	Milan CF	39	Sisoo, Khair, Kalki, Bans, Bet and Masla	8,213	Encroached
3	Hasulia-2, Badka Mudha	Shuva CF	10	Sisoo, Bans, Siris and Bet	586	Grazing land
4	Hasulia-4, Dakhinbharri	Bhagyasali CF	5	Masla, Bans, Siris and Kapok	914	Grazing land
5	Hasulia-4, imabhoji	Amrit CF	14	Sisoo and Masla	3,000	Grazing land
6	Hasulia-5, Lalpur	Lallpur CF	17	Sisoo, Khair, Siris, Bans, Kapok and Masla	2,997	Grazing land
7	Hasulia-5, Khonpur	Mohan CF	20	Sisoo, Khair, Bet, Kapok, Siris and Masla	9,450	Riverside
8	Hasulia-6, UttarBharre	Youth Club	10	Sisoo, Khair, Kapok, Siris, Masla	1,530	Degraded Forest
9	Has-6, Kamalpokhari	Vid. Jan. CF	1	Bet	50	Grazing land
10	Hasulia-8, Bishanpur	Bisanpur CF	2.5	Bans	25	Re -planted
11	Hasulia-8, Choupheri	Bandevi CF	25	Sisoo, Khair, Bet, Bans, Bel, Jamun, Kabro, Nim, Bakena, Badhar and Arjun	10,040	Encroached
12	Rat-9, Bhuinyaphanta	Sarswoti YC	3	Bet and Bans	270	Grazing land
13	Pawera-3, Chotipalia	Srijana	3	Masla, Siris, Bet, Bans and Kapok	783	Riverside
14	Basouti-9, Kailaligaon	Santoshi YC	2	Sisoo	800	Canal side
	Total		161.5 ha		38,933	

J. (2.3) Natural Forest Regeneration**Fencing and Trenches**

Encroachment by illegal settlers in the forest areas is a major problem in the Terai. Many forest areas have been occupied by encroachers. Where forests are degraded and barren, more encroachment is seen to occur. The District Forest Offices have been making many attempts to remove the encroachers from the forest areas and even local communities have mobilised to

protect their forest areas from the encroachers. The local communities are seen to be more successful in removing encroachers from the forests. The heavy pressure of forest encroachment has meant that this year's focus had to be on removing illegal settlements and protecting the forests from further encroachment. Over 10,000 families who had encroached forest areas were removed with the cooperation of the District Forest Officer (DFO) and local communities and about 5500 ha of forest area cleared (source: DFO, Kailali district).

The proposed CFUGs in the Basanta forests as mentioned in the table below, are protecting existing forests in their respective areas from further degradation. During July-August 2001 several local individuals, women's groups, clubs and CFUGs have planted seedlings of various species in their land. In order to promote natural regeneration, it is most essential to control the grazing at least for the first few years until the seedlings are established. For this, fences are built and trenches dug around the regeneration plots to stop livestock from entering. In Kailali district encroached forest areas were evacuated by the District Forest Officer (DFO). In those sites fencing and/or trenching work for natural forest regeneration and plantation is ongoing. A detailed field survey and cost estimate of fencing/trenching required has been completed. 10 metric tonnes of barbed wire has been purchased directly from the manufacturer. Details are given below:

Table 3: Information on Fences and Trenches

a. Basanta

	Site	Managed by	Management type	TAL	Local contribution	Remarks
1	<u>Coupheri</u>	Bandevis, CF	Trench 1110 m	Rs. 15540	Rs. 15,540	Completed
			Barbed fence 3 km	1725 kg barbed wire (BW)	labour	Ongoing
2	Ke-gaon	Milan CF	Barbed fence 2 km	1130 kg BW	labour	„
3	Nimabojhi	Amrit, CF	Barbed fence 1 km	575 kg BW	„	„
4	Mohanpur	Loutahawa CF	Barbed fence 2 km	1004 kg BW	„	„
5	Lalpur	Dhanbelia CF	Barbed fence 1.5 km	887 kg BW	„	„
6	Bhuiyaphanta	Gouri CF	Barbed fence 2 km	1150 kg BW	„	„
7	Bhadari	Bhagyasali CF	Barbed fence 1.5 km	1150 kg BW	„	„
8	Khonpur	Mohanpur	Barbed Fence 2 km	1100 kg BW	„	„
9	Shivratnap	Shiv Cf	Barbedwire 2	1150 kg	„	„

	ur		km	BW		
10	Bishanpur	Bishnu CF	Barbed fence 1.5 km	900 kg	„	„
11	Bhadari	Kamalpokhari	Barbed fence 2 km	1000 kg BW	„	„
12	Bhitaria	Sundhar Cf	Barbed fence 1.5	1100 kg BW	„	„
		Total	23.1 km			

b. Katarnia

S. N.	Site	Managed by	Management type	TAL Rs.	Local contribution Rs.	Remarks
1	Balkumai	Balkumari CF	Trench 1 km	10,000	20,000	Completed
2	Khata	Gourimahila CF	Trench 2.3 km	23,000	46,000	„
3	Kothiyagon	Janajagriti CF	Trench .9 km	9000	18,000	„
4	Teparital	Teparital CF	Trench 1.2 km	12,000	24,000	„
5	Sonahaphanta	Sonahaphanta CF	Trench 1 km	10,000	20,000	„
6	Khairani	Ganesh CF	Trench 1.2 km	12,000	24,000	„
7	Oralibajar	Malilalaxmi CF	Trench .8 km	8,000	16,000	„
8	Bipatpur	Jhuria Mahial CF	Trench .5 km	5,000	10,000	„
9	Bhangaha	Dalit Mahila CF	Trench 1 km	10,000	20,000	„
		Total	9.9 km	99,000	198,000	

Protection Support (*heralu*)

To strengthen the protection of existing community managed forests, TAL has provided support for hiring one *heralu*, that is forest guard, to each of 10 CFUGs for 7 months in the Katarniaghat Forest Corridor.

Table 4: Information on *heralus***a. Katarnia**

	Name	Rs.	Local contribution	Remarks
1	Balkumari Community Forest (CF)	7,000	Members guard accompany during patrolling	Ongoing
2	Gourimahila CF	7,000	„	„
3	Janajagriti CF	7,000	„	„
4	Teparital CF	7,000	„	„
5	Sonahaphanta CF	7,000	„	„
6	Ganesh CF	7,000	„	„
7	Malilalaxmi CF	7,000	„	„
8	Jhuria Mahial CF	7,000	„	„
9	Dalit Mahila CF	7,000	„	„
10	Srijanshil	7,000	„	„
	Total Rs.	70,000		

Kanji House

To discourage uncontrolled cattle grazing which damages both crops, natural regeneration and wild vegetation, 4 CFs in Katarnia corridor have constructed 4 *Kanji*-houses in their areas. *Kanji* houses are pens that are traditionally constructed to house captured livestock (grazing in other people's lands or forest areas) temporarily so that their owners can be fined. TAL has supported 200 kgs of barbed-wire costing Rs. 6874, the remaining cost of materials and construction amounting to Rs. 1500, was borne by users groups themselves. This has provided benefit to about 150 households.

J. (2.4) Institutionalization of Users Group**J. (2.4.1) Legalization of Community Forest User Groups.**

Community Forests (CF) under the DOF can legally receive the management authority from the government in what is termed as 'handover'. With this legal authorisation, communities are able to fully manage their forest resources. The institutional strengthening process of Community Forestry Users' Groups (CFUGs) includes training users' groups in forest management, leadership, organisation and financial management. They are also taken on study tours to visit CFUGs that are successfully and sustainably managing forests. Operational Plans of the CFs are at the same time reviewed and revised. In the Basanta area, out of 15 CFs targeted, 10 CFs were strengthened to takeover the legal management of the forests from the DOF. The areas which will be handed over to communities are degraded patches of forest, open grazing areas, riverside

and encroached lands. The progress is similar in the Katarnia corridor where 10 CFs have been targeted for institutional strengthening this year. Similarly in Lamahi and Dovan this year's target is 2 and 7 CFs. Community Forestry operational plans of 6 CFs in Lamahi were reviewed and revision is required of these.

Table –5: Stages of Community Forestry Management Handover

S.N.	Stage of CF	Basanta	Katarnia	Lamahi	Palpa	Total
1	Already handed over to CF	0	1	25	13	39
2	CF hand over plan prepared	15	10	2	7	34
3	Operational Plan Review and revision required	0	0	6	0	6

The two women managed CFs namely, Srijanashil and Janajagriti CFs of Katarniaghat Corridor were supported to establish their own office management. A grant agreement was signed and grant amount of Rs.10,000 was provided to each for procuring stamps, signboard, stationary, furniture and fixtures.

Similarly, 13 Buffer Zone Users Committees (BZUCs) and the Buffer Zone (BZ) council of the Royal Bardia National Park Buffer Zone were supported for their meetings and community strengthening by TAL DNPWC during this reporting period. The BZUCs according to the BZ regulations manage their forests in a similar manner to the CFs.

J. (3) Species Conservation.

Historically all the protected areas in the TAL were contiguous forest. Since habitats in the 4 protected areas of TAL (PWR, RCNP, RBNP and RSWR) are comparable and most of the vanishing wildlife populations are distributed through out the region, there is a good possibility to restore the endangered species in the protected areas. Large mammals like rhinoceros have been successfully translocated from the RCNP to RBNP and RSWR and currently efforts are underway to establish a second viable population of rhinos (100) in RBNP.

J. (3.1) Habitat Management

Grassland Management

Encroaching trees and unpalatable species emerging in the grasslands reduce the size of the *phanta* (open grassland) and decrease availability of palatable species of ungulates. To clear these unwanted species and maintain the grassland habitat, TAL program is supporting the Parks financially and technically to clear unwanted bushes, burn grasses and uproot the unpalatable trees and shrubs. Approximately, 50 ha of grassland in Lamkauli (RBNP) area have been managed especially to rehabilitate the decreasing Blue Bull population. 100 ha of grassland in Chepang area (RBNP) has been managed, where most of the encroached simal and unwanted grasses were uprooted. Again 100 ha of grassland have been rehabilitated in RSWR for restoring the Swamp Deer population.

Waterhole construction.

2 waterholes have been rehabilitated in Shukla Phanta and 2 waterholes are being constructed in Baghaura and Lalmati area of RBNP.

J. (3.2) Anti Poaching.

Anti poaching activities are conducted to minimize poaching and illegal trade inside the national park and outside. RBNP and the Royal Nepal Army (RNA) are working as a team to conduct effective patrolling.

Anti poaching unit

Two community based anti poaching units (APUs) have been established in the Basanta and Katarnia corridors. Patrolling will be carried out in these corridors mainly in the forest areas along the Indian border to the South where most of the illegal activities occur. Operational mechanisms have been decided on and patrolling is ongoing since November 2001.

17 anti poaching units are operating in the protected areas of TAL. RBNP regularly conducts sweeping operations where areas are literally swept of APUs for illegal activities. Given below are dates, location of patrolling, incidents registered and action taken against the convicted.

Table 6: Sweeping Operations of APUs

Date	Location	Activities	Action taken
September 18-21, 01	Gaine kanda/Manim Kanda/Babai valley	Sweeping operation conducted day and night	Few incidences found but no one captured
September 22, 2001	Parewodar	Heard a gun shot around 12:30 in the night in the buffer zone near to Parewodar	Night patrolling conducted
September 26, 2001	Bhurigaon	3 days combined patrolling in Bhurigaon area	No incidences recorded
Sept. 22-28, 2001	Manau Tapu/Khauraha	Illegal fishermen entering the park area	No one captured
October 16, 2001	Gaida Machan/Lalmati	Combined patrolling from elephant conducted	No incidences recorded
October 20, 2001	Hattisar/Baghaura Phanta	Combined patrolling from elephant	No incidences recorded
October 27, 2001	Parewawodar	Gunshot heard near the buffer zone	No incidences recorded
November 6, 2001	Babai valley	4 day long patrolling from Chepang to Ramuwapur	One tiger sighted and only huts found
November 8-10,	Parewawodar/G	Combined long patrolling	No incidences

2001	uthi	conducted	recorded but 4 elephants sighted
November 13, 2001	Amreni	One Sambar killed by a truck	Truck driver taken into custody.

APU training and equipment

Three days (September 11-16, 2001) anti poaching unit's capacity building training for two groups at different different locations were provided to rangers, senior gamescouts, and army personnel in the Royal Shukla Phanta Wildlife Reserve. A two days (October, 2-3, 2001) anti poaching unit capacity building training was conducted for 60 rangers, senior gamescouts, army personnel from Barkh Gulm and Bhimkali Gulm (both are army battalions) of RBNP. Anti poaching equipment for effective patrolling in the RSWR area has been supported by TAL program. The major items that were handed over to RSWR are sleeping bags, tents, rain coats, mattresses, water bottles, bicycles, torches and first aid boxes for the APU posts.

J (3.3) Wildlife monitoring.

Genetically viable populations of wildlife species can be maintained if landscape level approaches for management is applied and all the species are regularly monitored. Conservation of the flagship species such as tiger and rhino has been initiated in Nepal by WWF since the 1960s. One of the major successes of this species conservation is rhino translocation program.

Tiger monitoring

An agreement exists with the King Mahendra Trust for Nature Conservation (KMTNC) to support the tiger monitoring activities in the RCNP, RBNP and RSWR. Accordingly support has been provided for tiger monitoring mainly by photographing tigers using infra red equipment. Camera trap techniques supplemented by pugmark studies are used for tiger monitoring. Camera trap equipment has been installed in various locations in the RCNP, RBNP and RSWR. Information is also collected on foot and with the use of elephant and vehicles. A total of 83 tigers have been camera trapped.

Rhino monitoring & Translocation of rhinoceros from Royal Chitwan National Park (RCNP) to RBNP and RSWR.

Royal Chitwan National Park (RCNP) has the world's second largest population (over 500) of the Greater one-horned rhinoceros (*Rhinoceros unicornis*). Prior to the translocation of rhinos to the Royal Bardia National Park (RBNP), the Chitwan population was the only rhino population in Nepal. Due to the vulnerability of a single population to stochastic and other events, an objective to establish a second viable population was formulated, and rhinos were translocated to RBNP from Chitwan from 1986. Since then, the population of rhinos in RBNP has increased to 63. As the project aims to establish a third breeding population, 4 rhinos were translocated to the

Royal Shuklaphanta Wildlife Reserve (RSWR) in November 2001. The translocated rhinos in the RBNP and RSWR are monitored by the Park staff.

The rhino translocations are carried out with the support of the DNPWC, KMTNC and WWF Nepal. A task force is created under the coordination of DNPWC, KMTNC, WWF Nepal and independent wildlife biologists. They identify the capture sites, the number of animals to be captured from a particular age range and keeping the sex ratio. They also arrange logistics for translocation and the release sites in RBNP and RSWR.

The translocation of 10 rhinos is planned for March 2002. In preparation for this, the translocation core team has been formed comprising of DNPWC, KMTNC and WWF NP members. The field assessment and monitoring of rhinos is being carried out. Two meetings have been held in RCNP for the translocation and the logistics and technical teams have been formed. At the same time, site selection for the event is also being carried out.

Anti Poaching Posts

Two anti poaching posts were established in the Babai valley in RBNP to monitor the rhinos translocated from the RCNP. At the same time, two posts were rehabilitated in the extension area of the RSWR. Anti poaching units are stationed at the posts and operations to control poaching in the area are in progress.

Strengthening RTCPA

The Stein Moen Complex is a group of buildings in the Royal Bardia National Park which is not being used effectively. The Complex is a perfect site to conduct training activities. It can be used not only as an office space but also to conduct regional workshops, coordination meetings and run training programs. Currently this complex has not been used for any purpose due to lack of funding to cover its operation and maintenance cost. By undertaking the renovation and maintenance of this complex, TAL program can reduce future expenses in renting training and meeting sites for the program and for the DNPWC. TAL supported the maintenance of the water system and other necessary works. After the maintenance, the transboundary meeting was held there.

J. (3.4) Black Buck conservation in Bardia

The only surviving wild population of Black Buck is found in Khairapur of Gularia district in Nepal, close to the RBNP. Several agencies are involved in the management of this endangered species. RBNP, with the joint effort of DoF, Bardia, has been managing the Black Buck Conservation Area. RBNP has deputed gamescouts for the protection and daily counting is carried out of this species. The animal is threatened by hyaena and stray dogs. While stray dogs are killed, the hyaena threat is controlled by fencing. As Black Buck graze on very small grasses and prefer cultivated legume crops, RBNP with the support of TAL has sown seeds of peas,

lentils, mustard and wheat. Uprooting of unpalatable species such as *Ipomia* was also conducted this season. DoF has provided support in gate construction. On September 30, 2001, a coordination meeting was organized by RBNP at the Chief District Officer's (CDO's) office in Gularia. At the meeting it was decided that the Gularia municipality, RBNP and TAL will jointly implement the Black Buck conservation program.. It was also decided that with joint cooperation, the gazetting of the Black Buck sanctuary will be proposed. The current population of the Black Buck is 55 as counted on September 29, 2001.

J. (4) Sustainable development

The success of landscape scale conservation programs depends on the participation of local communities in conservation efforts. Participation of local people, who in the case of the Terai Arc Landscape are mostly poor farmers dependent on forest resources is enabled if they receive immediate benefits from conservation programs. Therefore integrated conservation and development programs (ICDPs) are necessary to uplift the socio economic conditions of the people so that they can be involved and committed for long term conservation. ICDPs must necessarily include activities that decrease local people's dependency on forests and protected areas while enhancing their living conditions.

J. (4.1) Alternative Energy

Most of the local communities use fuelwood for cooking. Only a small number of households use alternative energy such as biogas for cooking. Therefore the program aims to promote bio gas and improved cooking stoves in the project sites.

J. (4.1.1) Biogas plants and toilet construction.

The program is supporting local people to install bio gas plants by providing subsidies of Rs. 7000 for each plant. Additionally toilet pans are provided to those who connect toilet outlets to the plants. During this reporting period, 2 bio-gas plants have been installed in Hasulia and Ratanpur of Basanta corridor and 20 other plants are nearing completion. Of those bio-gas plants constructed with prior project support, 2 new toilets were constructed and linked to them to increase the volume of gas. Construction of biogas plants in Katarnia corridor has also started. Collection of materials like brick, sand, gravel and digging of hole for 15 plants have been completed. Request for biogas plants is increasing compared to the resources allocated.

J.(4.1.2) Improved Cooking Stove (*chulo*)

For poor farmers who cannot afford biogas, improved stoves are the cheapest means of reducing firewood use and consequently reducing the pressure on forest. The improved smokeless stove is also better for people's health. A-week long Improved Cooking Stove (ICS) training was organized by CF Co-ordination Committee, Dovan. In the training 20 participants, 3 female and 17 male were present from 19 CFs. The resource persons were from a local NGO. The Committee has targeted that they will construct 500 ICS through the trainees. Work has already been started but the actual number of construction has not been received.

J.(4.2) Livestock Management

Livestock management includes motivating livestock owners to experiment with alternatives to free grazing such as stall feeding and improving the livestock breeds. Activities range from

community managed fodder nurseries to strengthening traditional pasture management and pasture user groups. The program is exploring community interest in the feasibility of rotational grazing practices. Improved breed development was supported in RBNP BZ on September 2001 by distributing 3 male piglets for breeding. The indigenous livestock produce little milk so that it is only the bulls who come in use for ploughing. However, large numbers of unproductive livestock are still owned by farmers as the Hindu religion does not permit the slaughter of cows. These livestock are a threat to the forest areas as they are grazed there freely. Following discussions, the CF Coordination Committee network of Dovan VDC in Palpa is planning to procure improved livestock. Similarly, in the Basanta forest corridor area, discussions were held with concerned groups to purchase improved breeding bulls in order to improve livestock.

J. (4.3) Non Timber Forest Products (NTFP) Nursery

In the Katarnia corridor, Srijanashil Mahila CF has started a NTFP nursery. An agreement has been signed with the DFO, Bardia that TAL will support Rs.20,000 to grow 10,000 seedlings. 2,000 of the seedlings will be distributed free of cost to other CFs and the rest will be sold and the income deposited in the CF bank account. It is expected that this will promote NTFP cultivation among the CFs as well as farmers of the area.

J. (4.4) Income generation

Pig farming

With the objective of supporting income-generating activities based on traditional practices like pig farming, 30 female piglets of improved breed were distributed last year to the members of three women groups by the WETTREC project which is now part of TAL program. Seven pigs have died and the remaining pigs are now reaching maturity. It is a common practice in Tharu communities of TAL to rear local breed pigs therefore this activity has a greater chance of success. However, the local breed gives less economic returns and the pigs are raised unscientifically so they are susceptible to diseases.

J (4.5)Day Care Center

A Day Care Center has been started by local people of Ratanpur VDC, Basanta with the support of the Program. The local caretakers of the Center employed by the women management committee were trained in Bardia. TAL program and the management committee have signed an agreement to share the actual cost of operation. The full management responsibility is the committee's and TAL program's role is to supervise and support 75 percent of the operational costs. The management committee will seek ways to make the center sustainable. At the moment, rice and vegetables for the children's meals are collected from the parents. The people are ready to contribute labor and provide wood free of cost to construct a permanent house for the center.

J (4.6) Health Care Support

The medical doctor's visits to the Park Community health post twice a month supported by the Bardia Integrated Conservation Project (BICP) was continued. BICP was funded by the Netherlands Development Assistance (Neda), and after 6 years of implementation completed on November 30, 2001. A women assistant health worker was also provided by the BICP. At the same time, the project supported Thakurdwara VDC in RBNP BZ to carry out Japanese Encephalitis Vaccination for children upto 12 years. More than 2600 children received the vaccination with the help of the Thakurdwara sub-health post, Nikunj community health post and BARAKH gulm (army) health assistance.

TAL DNPWC has initiated the health post renovation in Mahadevpuri VDC, of the RBNP extension area, which is a TAL bottleneck area. A construction committee was formed comprising of local people and part of the fund was disbursed to buy raw materials. The dismantling work of a part of the old health post was completed and 80% of renovation work has been completed.

J.(4.7) Irrigation and infrastructure support

Betani user committee of RBNP BZ constructed a concrete dam to replace the traditional one that uses wood. The traditional dams are regularly washed away during the rainy monsoon season and require constant rebuilding which means the felling of trees for maintenance purposes. The UC contributed labor for the construction and only skilled labor of Rs.5000 was supported by the program. The dam provides water during the dry season and supports mentha farming that has been introduced to reduce wildlife damage.

J.(4.8) Temple Renovation

The Krishna Temple in Thakurdwara VDC was supported with Rs.290,00 for temple renovation.

J.(4.9) Tube Well Construction

In Katarnia, 5 tube-wells were constructed at a cost of Rs. 30,000 shared 50% by the users and 50% by TAL. The tube wells benefited 28 households by providing drinking water and irrigation.

Table 7: Tube wells

	Location	Number	Local contribution (Rs.)	TAL (Rs.)	Beneficiaries
1	Sonahaphanta CF, Suryapatuwa	1	1,000	3,000	5 households (hh)
2	Gouri Mahila CF-Dhodhari	2	2,000	6,000	13 hh
3	Janjagriti CF, Suryapatuwa	2	2,000	6,000	10 hh
	Total	5	5,000	15,000	28 hh

J. (5) Education and Capacity Building

Education is the key for the success of any conservation program. Unless people understand the reasons for conservation of forests and wildlife, their participation cannot be expected. Conservation awareness program needs to be developed for different target groups to help them understand how, by conserving biodiversity and ecological processes, they can help themselves to live healthier and happier lives. TAL extends far beyond the boundaries of protected areas to include forest corridors and villages. Therefore, it is important that the people in the landscape understand their role in the protection of the forest corridors, biodiversity and the endangered species such as the tiger, rhino and elephant.

J. (5.1) Education

Literacy

In 3 VDCs of Basanta corridor, 6 literacy classes for 150 local livestock herders (*gothala*) have been successfully completed. Similarly, new *gothala* education program has been initiated in Tanduwa, Chitkaiya, Motipur, and Thakurdwara from December 2001. There are 50 *gothala* students benefiting from this educational program.

Eco Club

The Eco Club program aims to enhance conservation education among school children. In this program, eco clubs are formed in schools and school children who are members become active participants and motivators for conservation. In Dovan VDC of Palpa district, 3 Eco-clubs have been formed in three high schools. Meetings with schools are going on in Basanta and Katarnia corridor to form new Eco-clubs. In Kailali and Kanchanpur districts, 11 eco clubs formed earlier in the year are running.

Community Mobile Education and Extension

Video

In all nine Wards of Masuria VDC of Basanta corridor, 5 different conservation related videos were shown to villagers. Altogether over 700 people mainly female and a local club were present in the program and it was organized by Pragatishil Samaj Tatha Vatavaran Samraktshan Manch .

Drama

A local CBO ,Vidhyarthi Jana-Jyoti Yuba Club managed to show a drama in the local Tharu language “ Hamar Pichhadal Tharu Samaj” in 3 sites covering all the villages of Ratanpur VDC. The main message given was the negative impacts caused by forest destruction, encroachment, and ignorance. About 800 people, both women and men watched the drama.

Kael Pahura

Kael Pahura series number 2 and 3, year 4 were published and distributed. This is a newsletter begun by the BICP and its main aim is to spread conservation awareness. The main features of these publications were information on the highlights of the silver Jubilee of RBNP, audio visual show held in Shivapur bandrawa, journalists interaction on TAL, APU training, APU operations, awards, biogas installations, welcoming events, habitats management works, Thakurdwara festival, wildlife museum, crocodile breeding centers and BICP final evaluation.

Environmental Education Package.

Twenty boxes of *Sampada Sanduk*, an environmental education material was prepared for school conservation awareness program. Each box contains brochures, butterfly and seed specimens and audio visual material.

J.(5.2) Capacity Building**TAL Orientation**

In August, one-day community orientation meetings were organized in VDCs of Hasulia, Pawera and Ratanpur of Basanta corridor to disseminate the goal, objectives, activities and working mechanism of TAL. These meetings were very effective to reduce confusion among people and create better situation for implementation. Similar workshops were held in all villages of Dhodhari and in a few places of Suryapatuwa

In November and December, DFO Bardia organized 3 one-day orientation programs, to CF members and other stakeholders to share present activities and working modalities. It was clarified that TAL program is a joint effort of partners including the local people and is run by the DNPWC and DOF.

CF Workshop

A 3-days CF workshop was held in Dhodhari, Katarnia organized by a CBO with the support from TAL. There were 25 participants from CFs, Federation of Community Forestry Users Network (FECOFUN), local leaders and DFO staff. During the workshop vision and activities of TAL were briefed and how various stakeholders could join hands to make program more complementary and implement through shared vision and cooperation.

M.Sc. studies supported

Two DoF officers were supported from September 2001 to pursue their M.Sc. degree from Deemed University, Dehradun, India. They are Mr. Surya K. Mishra and Mr. U. Choudhary.

J. (6) Communication

During this reporting period, a video film and a factbook on the TAL were produced. Himalya Films of Kathmandu were contracted to make the video film. Mr. Kishor Pradhan was contracted as TAL communications consultant to coordinate the video film making, develop the fact book and prepare a TAL communications strategy. He is also preparing drafts for brochures, both Nepali and English on the TAL. Feature articles on the TAL were brought out in leading newspapers by Mr. Pradhan and other journalists.

J.(6.1) Campaigns

Street theater is an effective means of communication. These kind of shows have been organized in different locations namely Thakurdwara, Shivapur, Neulapur, Katarnia and Mahadevpuri. The main theme of these shows was to involve local people in natural resource management and also to make them realize the importance of National Park. These shows were organized by a local NGO, RARA library from East Chisapani and financially supported by TAL program.

J.(7) Policy and Advocacy

J(7.1) Proposed TAL Policies

Dr. Uday Raj Sharma has been consulted to carry out a study and prepare proposed policies for TAL. Dr. Sharma is the Chief of Environmental Division, HMG/MFSC.

J.(7.2) Field Level Stakeholders Transboundary meeting

Most of the illegal activities such as wildlife trade, poaching, illegal timber trade, collection of endangered species of orchids and other plants occur along the Nepal and India border. To achieve the objectives of TAL, trans-boundary cooperation and collaboration is necessary. Based on the need of trans-border relations, DNPWC with WWF NP organized two different agenda preparation meeting in RBNP and RCNP. All park wardens, DoF and project partners from Terai participated in the meeting held from September 15-25.

K. Achievements

The major achievement has been the endorsement of the TAL program by His Majesty's Government of Nepal. A Supplementary grant agreement was signed between the Ministry of Forests and Soil Conservation and WWF Nepal Program on July 13, 2001 for TAL implementation. Grant agreements were then signed with DNPWC and DoF for the two project components, which are the TAL-DNPWC and the TAL-DoF. Both the departments have appointed their Deputy Director Generals as the Program Coordinators of the projects. They have also deputed Project Managers. Thus the government is taking the lead role in TAL implementation.

Another major impact was awareness generation for the conservation of the corridors among governmental and non-governmental line agencies and the local people. The intensive consultation process and involvement in all levels of implementation has resulted in generating a high degree of awareness for conservation which is apparent in the line agencies and people's involvement in conservation activities such as plantation and alternative energy. Local people and governmental authorities have worked to remove encroachers into forest areas in some parts.

The illegal settlers from the forest corridors was a huge threat to the goals of the program and their removal was a major task that was impressively carried out with local people's participation. More than 5500 ha of forests have been cleared of illegal settlers in the Basanta forests.

The local people's mobilisation for conservation as well as DoF's involvement has been quite successful in the bottleneck and corridor areas of TAL so that it has been possible to carry out more work than targeted in the workplan. For e.g. initially 7 forest nurseries were targeted for this year but it was possible to establish 11 nurseries. Also, it was planned to carry out 100 ha of plantation. Due to people's participation it has been possible to carry out plantation on 161.5 ha this year.

In this initial phase of TAL program implementation, the program has also been able to form and develop partnerships with donor agencies and international NGOs. Memorandum of Understanding (MOU) have been signed by WWF NP with the UNDP, SNV and ICIMOD for cooperation on landscape level conservation.

L. Conclusion

Tal is actively engaged in achieving integrated conservation and development activities for biodiversity conservation and community development. WWF NP has drawn on its previous experience with ICDPs particularly the successfully implemented BICP. It is seen that continuous discussions with local communities are necessary to have fruitful results. For this the mobilizers need to be trained and proper orientation given. Monitoring visits in the project sites continue to reflect the need for extension programs therefore extension will remain a focus of the program . Project activities, particularly those dealing with community services, infrastructure development and income generation must be coordinated with the Village Development Committee, women's groups and youth clubs. Infrastructure development must be conducted through VDCs and local NGOs. And, in order to avoid duplication of activities by Project and government line agencies, coordination between the respective agencies must be continued. Management and conservation training have been provided to the forest users' groups and conservation groups and VDC members. The effect of these training is apparent in the way that the groups have been mobilised to improve the forest conservation and confront the encroachment problem. Training and study tours will remain a priority with the program for institutional building. Additionally, the women's groups will be provided with capacity building and biodiversity awareness training.

